

### ABSTRACT

A high Q inductive element with low losses, high inductance and high efficiency  
5 is disclosed. The high Q inductive element with one or more inductive loops is formed  
over a silicon micro structure with thin support elements formed by deep plasma etching in  
bulk silicon. The support elements, which may have different configurations, such as walls  
or columns, provide mechanical stability to the inductive loops and reduce the parasitic  
capacitance and the losses to the substrate.